**Summer Math Requirements**
**for**
**AP Calculus AB/BC**
**IB Math Analysis & Approaches HL1/SL2**

Dear P-CEP Math Student,

Your past, present, and future math teachers have one hope for you–that you will find success in whatever math course you take. To that end, we are providing you with the following resource and advice.

Below you will find a link to a Khan Academy course named "Get Ready for AP Calculus":

https://www.khanacademy.org/math/get-ready-for-ap-calc

This Khan Academy course provides lessons, practice, and assessments on many math topics that are essential for finding success in any Calculus course. You are not required to complete every module or assignment in this course. However, ***during the first week of school, you will be tested on the material in this course***, because it is imperative you have a good understanding of these topics.

Here are some recommendations for how to proceed:

1) **Find the Gaps**
    a) For each unit*, start by finding the Unit Test and see if you are able to complete it. (Click on the link for Unit 1 and scroll down to the bottom to find the Unit Test)
    b) If you do well, move on to the next unit.
    c) If you find you have some gaps in your knowledge or understanding, watch a video, do some practice on that topic, and then complete the topic Quiz.
    d) When you have finished all units, go back to the main course page (you can click on the Get Ready for AP Calculus link near the top of the page) and complete the **Course Challenge****.

OR

2) **Search the Topics**
    a) For each unit*, read through the topics listed and identify any you know are weaknesses.
    b) Watch videos, do some practice and take the quiz.
    c) Proceed through the unit until you are confident you've got a good understanding of each topic.
    d) Take the Unit Test.
    e) When you have finished all units, go back to the main course page (you can click on the Get Ready for AP Calculus link near the top of the page) and complete the **Course Challenge****.

(see other side)

OR

3) **Complete the Whole Course**
    a) This is pretty self-explanatory*.
    b) When you have finished all units, go back to the main course page (you can click on the Get Ready for AP Calculus link near the top of the page) and complete the **Course Challenge****.

* Units 8 & 9 are BC topics and only necessary for AP Calc BC & IB Math AAHL1 students.

** The Course Challenge is by no means a complete assessment of all topics, but you can take it repeatedly to see new problems and "boost" your score in each topic. Also, it will include some BC topics and AB/SL students are encouraged to bypass those problems.

Here are a few parting thoughts:

- Be honest with yourself as you complete this work. If you make a mistake, own it *and fix it*. Don't dismiss mistakes as "silly". Generally, these mistakes are ones we've made over and over and over again, but never took the time to really correct or understand.
    - For example, if you "forget" to add the +/- to your answer when you take the square root of both sides of an equation your problem might have started at the *beginning* of the problem. Did you notice it was quadratic? Did that make you think about how many solutions there might be?

- AP Calculus and IB Math Analysis & Approaches courses are fast-paced and you will constantly be learning new things. If there are deficits in your understanding of previously learned concepts, it will slow your ability to move forward in these courses.

- One big takeaway from this assignment should be that ***you are responsible for identifying the gaps in your skills and understanding and for doing something about them.*** Your teachers are here to guide and support you.

It may not feel like it, but one of the things your teachers do to support you is give assessments. Don't forget that you will be tested on the material from this course during the first week of school!

We wish you all the best as you embark on this adventure!

Mr. Batell, Mr. Guinta, Ms. Ludema, & Ms. Wisniewski